

NWSRI VIDEO SERIES

VIDEO 1 - CONSERVATION CENTRE

This video gives a general overview of the purpose of the Nechako White Sturgeon Conservation Centre, why it was built, how it works, and the main work that happens at the hatchery.

The vocabulary in this video may be beyond that of primary students, however there are a few things that would be interesting for the students to see. First, here is a breakdown of the video contents...

Total Length: 9:03 minutes with the main topics from each section being:

Overview of the Conservation Centre: 00:00 to 01:36

This section explains the concern with sturgeon in the Nechako River, and why the Conservation Centre was built.

Preservation of DNA: 01:36 to 02:54

This section gives the goals of the Conservation Centre.

Recirculating Aquaculture System: 02:54 to 04:50

This section talks about the water cleaning system at the hatchery. It is an elaborate and efficient system, but the video shows some of the part of the systems. They also talk about IMPRINTING - see the attached activity sheet.

Spawning Ground: 04:50 to 06:06

This section gives an overview of the characteristics of sturgeon spawning habitat. Pay attention to where the only known site for Nechako White Sturgeon spawning is located.

Broodcapture and Release after Spawning: 06:06 to 09:02

The section shows how they catch sturgeon for the hatchery's brood program. Brood is a general term used to explain the mature animals that are used to get eggs and milt from to make new sturgeon.

There is some fun video of the two different ways they catch sturgeon in the river - ANGLING like you would for catching a trout; and SET-LINING which has lots of hooks on long lines that stay in the river overnight.

The attached activity sheet asks the question of WHAT STURGEON LIKE BEST TO EAT - see the attached activity sheet.

DEFINITIONS

Throughout the video, the narrator uses scientific language.

Recruitment: The number of young fish that reach maturity. Maturity is when a fish is ready to spawn. Spawning is when fish release their eggs and milt (sperm) to make new fish.

Natural Recruitment: Fish spawned in the river (not in the hatchery) that survive to reproductive age (maturity).

Recruitment Failure: When fish do not reach maturity. These fish die at a life stage before they reach maturity. Think of the **Sturgeon Wheel of Life** and all the ways sturgeon can die!

Stop-Gap Measure: A temporary solution, while you find a better solution.

Founder Population: Starting a new population from a small group of individuals.

Genetic Diversity: Individuals in a population that have a wide range of characteristics that helps them survive harsh changes in the environment.

Imprint: Every water system has a set of chemicals that gives it a unique 'scent'. A fish will 'learn' or imprint this scent at an early age. This is how they instinctively return to spawn in the same river from which they were hatched.

Effort: Is a measure of the amount of work put into catching fish.

More available at:

www.nechakowhitesturgeon.org

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About the Conservation Centre

Imprinting! (03:30 minutes)

Every river has its own 'smell' and baby fish remember that smell so they can return to their home river when they are older and ready to spawn.

How do workers at the hatchery help young sturgeon know where their home river is?

Draw a picture of a young sturgeon in the river.

Catching Sturgeon! (06:13 minutes)

Workers at the hatchery have to catch adult sturgeon so that they can hatch new young sturgeon to put into the river.

How do workers at the hatchery catch sturgeon?

Draw yourself helping workers at the hatchery catch a sturgeon in the Nechako River.